

WHAT IS CLAIMED IS:

1. A deposited film forming apparatus comprising  
a power applying electrode disposed above a flat plate  
type base member grounded, in a vacuum chamber, and a  
5 power source for supplying a power to the power  
applying electrode,

the deposited film forming apparatus being  
constructed to supply the power from the power source  
to the power applying electrode so as to generate a  
10 plasma in a discharge space between the power applying  
electrode and a substrate disposed in opposition to the  
power applying electrode in the vacuum chamber and  
serving as an electrode in a pair with the power  
applying electrode, thereby decomposing a source gas  
15 introduced into the vacuum chamber to form a deposited  
film on the substrate,

wherein the power applying electrode is fixed to  
the base member with the power applying electrode being  
20 isolated from the base member.

2. The deposited film forming apparatus according  
to Claim 1, comprising a mechanism for conveying the  
substrate.

25 3. The deposited film forming apparatus according  
to Claim 2, wherein the mechanism for conveying the  
substrate is of a roll-to-roll system, and the

deposited film is formed while the substrate is conveyed thereby.

4. The deposited film forming apparatus according  
5 to Claim 1, wherein the distance between the power  
applying electrode and the substrate is 5 mm to 20 mm.

5. The deposited film forming apparatus according  
to Claim 1, wherein the power applying electrode is  
10 fixed to the base member with an electrically  
insulating, fastening member.

6. The deposited film forming apparatus according  
to Claim 1, wherein the base member is disposed around  
15 the power applying electrode and the power applying  
electrode is fastened by the base member.

7. The deposited film forming apparatus according  
to Claim 1, wherein the base member is held between and  
20 fastened by the power applying electrode and a power  
introducing portion penetrating the base member in  
order to supply the power to the power applying  
electrode.

*raised power  
introducing  
electrode*

8. The deposited film forming apparatus according  
to Claim 1, wherein the power applying electrode and  
the base member are fixed with an electrically

insulating adhesive.

9. The deposited film forming apparatus according to Claim 1, wherein the power applying electrode is  
5 fixed to the base member at an end portion of the power applying electrode.

10. The deposited film forming apparatus according to Claim 1, wherein the power applying  
10 electrode is fixed to the base member at a position effective to suppress deformation of the power applying electrode.

11. The deposited film forming apparatus  
15 according to Claim 1, wherein an electrically insulating spacer is placed between the power applying electrode and the base member.

12. The deposited film forming apparatus  
20 according to Claim 1, wherein an electrically insulating material is filled between the power applying electrode and the base member.

13. The deposited film forming apparatus  
25 according to Claim 1, wherein the distance  $s$  [mm] between the power applying electrode and the base member satisfies the relation of  $s \leq k/P$ , where  $P$  [Pa]

is a pressure in the vacuum chamber during formation of the deposited film and  $k$  is a constant of 1500 [Pa·mm].

14. A method of forming a deposited film  
5 comprising using the deposited film forming apparatus  
as set forth in any one of Claims 1 to 13.